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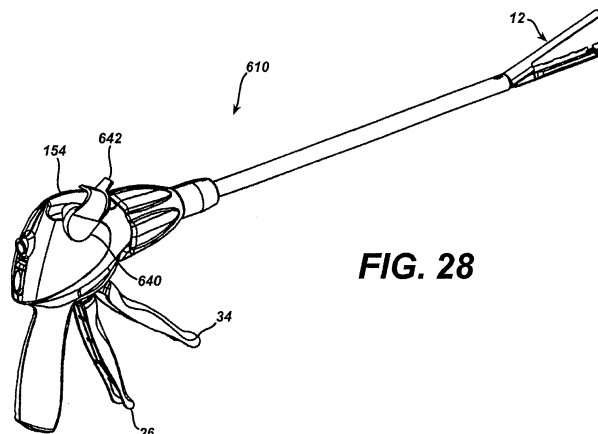
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(54) **Surgical stapling instrument incorporating a multi-stroke firing mechanism and a rotary manual retraction system**

(57) A surgical stapling and severing instrument particularly suited to endoscopic procedures incorporates a handle that produces separate closing and firing motions to actuate an end effector. In particular, the handle produces multiple firing strokes in order to reduce the required amount of force required to fire (i.e., staple and sever) the end effector. A linked transmission reduces the required handle longitudinal length, yet achieves a

rigid, strong configuration when straightened for firing. A traction biased firing mechanism avoids binding in driving this straightened linked rack in cooperation with an anti-backup mechanism, with a lockout mechanism that prevents releasing the closure trigger during firing. Furthermore, an external indicator gives feedback to the surgeon as to how far firing has progressed, as well as providing a manual retraction capability.

**FIG. 28****EP 2 263 564 A3**



EUROPEAN SEARCH REPORT

Application Number
EP 10 17 7445

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The present search report has been drawn up for all claims			
Place of search The Hague		Date of completion of the search 2 May 2011	Examiner Giménez Burgos, R
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**ANNEX TO THE EUROPEAN SEARCH REPORT
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